

Appl. No. 09/995,511
Reply to Office action of 01/10/2005

REMARKS

Favorable reconsideration of this application is requested in view of the above amendments and the following remarks. Claims 1, 4, and 8-10 are hereby amended. Claims 33-36 are new. Claims 3 and 7 are canceled without prejudice or disclaimer.

The amendment of claim 1, reciting that "an organic monomolecular film is bonded and fixed to a part of or an entire surface of the base material", is supported by page 3, lines 23-24. Claim 4 is amended to conform with language of claim 1. Claim 8 is rewritten in independent form. Claims 9 and 10 are amended to correct dependencies.

Claims 1 and 3-13 were rejected as being unpatentable over Amici (US 6,822,781) in view of Ootake (EP 0 849 003). Applicants traverse this rejection. Claims 3 and 7 are canceled. Applicants are not conceding the relevance of the rejection as applied to claim 3 and 7. Neither Amici nor Ootake suggests that an organic monomolecular film is bonded and fixed to a part of or an entire surface of the base material, as required by claim 1. Molecules of a monomolecular film are oriented in a predetermined direction and charge density at a surface of the film becomes higher than that of a film in which the molecules are not oriented. For example, a surface charge density of the dissociated monomolecular film according to the current invention was measured from 0.2 to 0.24 C/m², which is considerably higher than that of a film which is not a monomolecular film (see page 31, lines 30-34). The monomolecular film makes it possible to rotate the base material with a low electric field, thus achieving a high drive efficiency.

Further, claim 8 requires the presence of a liquid that has a high resistance of 10⁴ Ωcm or more, with the organic film comprising adsorbed water and is being in contact with the high resistance liquid. Neither Amici nor Ootake suggests that the organic film fixed to a surface of a base material comprises adsorbed water so as to be in contact with the high resistance liquid (see, for example, Amici column 13, lines 1-5). A surfactant does not absorb water but only adjusts the amount of charges.

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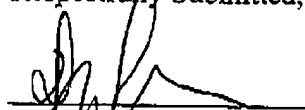
The high resistance liquid of the invention of claim 8 provides the voltage applied between the electrodes, sandwiching each base material element, to act as an outer electric field without being electrostatically shielded by liquid. The high resistance liquid suppresses the electrolysis of the organic film, however the adsorbed water in the organic film promotes electrolysis so as to increase the amount of charges on the surface of the base material. The prior art fails to suggest this advantage.

Favorable reconsideration of claims 1, 4-6, and 8-13 is requested.

Claims 2, 14, and 15 were rejected as being unpatentable over Amici, in view of Ootake, and further in view of Sheridan (US 5,815,306). Applicants traverse this rejection. Claims 2, 14, and 15 should be considered allowable for at least the same reasons as claim 1, from which they depend. Favorable reconsideration of claims 2, 14, and 15 is requested.

In view of the above, favorable reconsideration in the form of a notice of allowance is requested. Any questions regarding this communication can be directed to the undersigned attorney, Douglas P. Mueller, Reg. No. 30,300, at (612)455-3804.

Respectfully Submitted,



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Dated: May 10, 2005



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